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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/799,205

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Henri Waelbroeck

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EXAMINER

EBERSMAN, BRUCE I

ART UNIT

PAPER NUMBER

4172

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/799,205	<b>Applicant(s)</b> WAE LBROECK ET AL.	
	<b>Examiner</b> Bruce I. Ebersman	<b>Art Unit</b> 4172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/17/05 10/25/07 and 11/25/07</u> .                         | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **CLAIM REJECTIONS 35 USC 112**

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant uses the term calls in terms 15-17. Examiner notes that calls in the financial industry could be phone calls, call options or notification via an email. Applicant is requested to clarify appropriately.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 20-23, rejected under 35 U.S.C. 102e as being unpatentable over Patent Publication 2003/0093343 to Huttenlocher

As per claim 20,

Huttenlocher teaches a financial information exchange server (fig 14), transactional databases (fig 14), and reference price calculation (0005), inherently via server, trade facilitation system in communication with exchange networks and communication networks, (fig. 14 and 0005), and said communication is in contact with terminals (fig.15 trading display implies terminal). Huttenlocher further discloses a reference price. (0105) and execution to provide improvement where applicable.

As per claim 21, Huttenlocher (0033) discloses the ability to specify price aggression, 005 and compare to a reference price, (0105) which in this case is the actual market.

As per claim 22, Huttenlocher (0105) discloses that the first user is notified when a contra order has been received by said trade computer if the first order is at least as aggressive as the market price. (ie, the transaction will be consummated and the seller notified).

As per claim 23, Huttenlocher (0105) discloses minimum block requirements where a user can determine minimum order sizes to which his order can be displayed.

### **CLAIM REJECTIONS 35 USC 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,4,5,12 rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Publication 2003/0004859 to Shaw in view of US Patent 5689652 to Lupien. .

As per claim 1;

Shaw discloses;

electronically receiving market data including prices for a security; (00181)

electronically receiving a first order regarding said security from a first user, (0076)

wherein said first order comprises a first price limit and a first quantity limit;

electronically storing said first order in a computer readable medium; (00181)

electronically receiving a second order regarding said security from a second user,

wherein said second order is contra to said first order and comprises a second price limit and a second quantity limit; (0076 and 00181)

electronically storing said second order in a computer readable medium; (00181)

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Shaw does not specifically disclose reference price methodology and does not disclose computer executed trading.

Lupien teaches;

calculating a reference price for said security based at least partially on said market data; (Col 2, line 10)

electronically storing said reference price in a computer readable medium; (Col 2, line 10)

and executing a trade comprising said first order and said second order at a price whose difference from said reference price is minimized, wherein said trade complies with said first and second price and first and second quantity limits. (Col 2, line 10)

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the electronic trading system of Shaw with the reference stock price and fulfillment teachings of Lupien to facilitate efficient security trading, ie. at a price which is guided by reference price and minimizes spread.

As per claim 2, Shaw discloses;

A method as in claim 1, further comprising: transmitting an electronic notification to said first user (paragraphs 16 and 21)

and (b) said first order is priced at least as aggressively as said reference price; wherein said notification notifies said first user that a contra order has been placed in said system. (00181),

Shaw does not specifically disclose that) said first order is priced at least as aggressively as said reference price. Lupien teaches reference prices for the purpose of matching orders in correlation to the market price (Col 2, line 10) t would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the matching disclosure of Shaw with the reference price teachings of Lupien for the purpose of allowing anonymous matching of trades in relation to the current market price.

As per claim 4, Shaw does not disclose reference prices. Lupien teaches reference prices based on market prices (Col. 2, line 10) for the purpose of providing a reference price for block trades and to maintain sync with other higher volume, smaller size traded markets. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the matching system of Shaw with the reference pricing of Lupien for the purpose of conducting more accurate block trading.

As per claim 5, Shaw does not specifically teach a reference price. Lupien teaches reference prices (Col. 2, line 10) and display prices (Col. 2, line 15) which by definition are displayed.

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As per claim 12, Shaw (0048) discloses notifying a party when a nearly matching order is in the system so that the parties can contact each other and consummate a transaction.



Claims 6-11 rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Publication 2003/0004859 to Shaw in view of US Patent 5689652 to Lupien further in view US Patent Publication 2003/0093343 to Huttenlocher.

As per claim 6, Shaw (0004) discloses block trades. Shaw and Lupine do not specifically disclose notification when the 2<sup>nd</sup> order is at least as aggressive as the passive end of said block range. Huttenlocher (0033-36) teaches investor specificity as to levels of aggressiveness in regards to showing his/her order, whereby the investor can specify the block range that would implicitly be calculated to determine if the investor specified aggressive stances are met. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the confidential block trading disclosures of Shaw and Lupien with the investor specified aggressiveness teachings of Huttenlocher for the purpose of creating a confidential trading system that would allow security block sales to be negotiated when the buyer and seller prices are within a reasonable variance.

As per claim 7, Shaw discloses block trading but, does not specifically disclose calculating a block range based on recent volatility in a security. Lupien (Col 2, line 37) teaches market price based on the spread of a particular security, spread being one

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measurement of volatility. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the trading system disclosure of Shaw with the known concept of pricing based on volatility or variability of Lupien for the purpose of more accurate block trade pricing.

As per claim 8, discloses teaches block trading but, does not specifically disclose a block price range calculated within a pre-determined time period. Lupien teaches (Col 2, line 37) teaches predicting price ranges within a predetermined time period, ie. MMX system executes within a predetermined time at market price for the purpose of accurate trading It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the trading system disclosure of Shaw with the concept of pricing during a predetermined time period taught by Lupien for the purpose of transacting blocks at a price approximating market during a pre-determined time window.

As per claim 9 Shaw teaches block trading but, does not specifically disclose a block price ranges recalculated at intervals within a predetermined time period. Lupien (Col 2, line 37) teaches recalculating at intervals of time within a predetermined time period, ie. MMX system executes within a predetermined time at market price for the purpose of accurate trading It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the trading system disclosure of Shaw with the concept of recalculating pricing during a predetermined time period taught by Lupien for

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the purpose of transacting blocks at a price approximating market during a pre-determined time window.

As per claim 10, Shaw discloses block trading but, does not specifically disclose current or recent market prices, though it's implied that a trading market would trade at recent or current prices. Lupien (Col 2, line 37) teaches trades which are conducted at market or recent prices for the purpose of trading at a reasonable price for both parties. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine Shaw's block trading disclosure with Lupien's teachings of market price transactions for the purpose of transacting block trades at recent or current market prices.

As per claim 11, Shaw (0028) discloses prospective entries where the user can anonymously indicate an interest in a security with buy/sell but, does not specifically disclose notification based on pricing and aggression to price. Lupine teaches pricing based on market (Col. 2, line 37). It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the notification of active interest principles of Shaw with the market pricing teachings of Lupine for the purpose of notifying other participants that activity exists in an anonymous market. Shaw and Lupine do not teach notification based on ranges of aggressiveness of an order. Huttenlocher (0033-6) teaches levels of aggressiveness for the purpose of disclosing orders. It would therefore have been obvious to one of ordinary skill in the art at the time

of the invention to combine the anonymous indication disclosure of Shaw with the market pricing teachings of Lupine and the market aggression teachings of Huttenlocher for the purpose of notifying other trading participants when a aggressively price order is pending in the system without disclosing the specific party and position.

Claims 3, 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Publication 2003/0004859 to Shaw in view of US Patent 5689652 to Lupien further in view of official notice by the examiner.

As per claims 3, 13, Shaw (claims 51 and 52) disclose time limitations to allow for further negotiation. Shaw and Lupien do not specifically disclose a time where upon the bidder is prevented from increasing price aggression (ie. bidding again). Examiner takes official notice that since the invention of Shaw requires buyer and seller interaction once a match is made, it would be obvious to one of ordinary skill in the art at the time of the invention that it would not be possible or desirable for bidders to be able to constantly re-bid during a minimum time period when the buyer and seller are reviewing the orders and the computer is performing a matching function. Thus, orders would need to be frozen for a period of time. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the time limitations disclosed in Shaw with the examiner noticed teachings of built in delay or holds for orders for the purpose

allowing the computer system to match available bids and for review of such bids prior to them being changed.

Claims 14, rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Publication 2003/0004859 to Shaw in view of US Patent 5689652 to Lupien further in view of US Patent 7162447 to Cushing

As per claim 14;

Shaw discloses;

orders in a security, ie price or time limits. (0042)

electronically receiving market data including prices for a security; (00181)

electronically receiving a first order regarding said security from a first user, (0076)

wherein said first order comprises a first price limit and a first quantity limit;

electronically storing said first order in a computer readable medium; (00181)

electronically receiving a second order regarding said security from a second user,

wherein said second order is contra to said first order and comprises a second price limit and a second quantity limit; (0076 and 00181)

electronically storing said second order in a computer readable medium; (00181)

Shaw does not specifically disclose reference price methodology and does not disclose computer executed trading.

Lupien teaches;

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calculating a reference price for said security based at least partially on said market data; (Col 2, line 10)

electronically storing said reference price in a computer readable medium; (Col 2, line 10)

and executing a trade comprising said first order and said second order at a price whose difference from said reference price is minimized, wherein said trade complies with said first and second price and first and second quantity limits. (Col 2, line 10)

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the electronic trading system of Shaw with the reference stock price and fulfillment teachings of Lupien to facilitate efficient security trading, ie. at a price which is guided by reference price and minimizes spread.

Shaw and Lupien do not specifically disclose notifying one or more users of a system accumulation period and further transacting at the end of the accumulation period.

Cushing col. 3, line 40 teaches a accumulation and execution periods for the purpose of setting a time where orders can be accumulated for execution in an organized fashion.

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the electronic trading system of Shaw with the reference stock price and fulfillment teachings of Lupien and the accumulation period teachings of Cushing to facilitate efficient security trading, ie. at a price which is guided by reference price and minimizes spread within a reasonable period of time.

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Examiner notes that claims 15-17 use the term call which can be ambiguous when used in the financial industry. Call could be a phone call, an email or other notification or a call as in call option (put or call). Examiner believes that the term call is being used to notify potential bidders.

As per claim 15, Shaw (0005) discloses call times in a trading system.

As per claim 16, Shaw (0005) discloses regular (specific) call times throughout the day

As per claim 17, Shaw (0004-5) discloses regular call times and block trading when interest exists.

As per claim 18, Shaw (0005) discloses regular call times to both buy and sell securities.

As per claim 19, Shaw (0004-5) discloses receipt of orders to buy and sell securities including reference to large blocks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce I. Ebersman whose telephone number is (571) 270 3442. The examiner can normally be reached on 630am-5pm, with every Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Dixon can be reached on (571) 272-6803. The fax phone<sup>1</sup> number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bruce I Ebersman  
Examiner  
Art Unit 4172

/Thomas A Dixon/  
Supervisory Patent Examiner, Art Unit 4172